Claims

1. An isolated, pesticidal protein wherein said protein comprises a pesticidal fragment of the full-length *Cry*6A toxin of SEQ ID NO:2, wherein said protein has a molecular weight between approximately 34 kDa and approximately 50 kDa.

2. The protein of claim 1 wherein said protein has a molecular weight of approximately 40-48.7 kDa.

3. The protein of claim 1 wherein said protein consists of a pesticidal fragment of the full-length *Cry*6A toxin of SEQ ID NO:2.

4. The protein of claim 1 wherein said protein comprises the amino acid sequence of SEQ ID NO:6 or a pesticidal fragment of SEQ ID NO:6.

5. The protein of claim 1 wherein said protein consists of the amino acid sequence of SEQ ID NO:6 or a pesticidal fragment of SEQ ID NO:6.

6. The protein of claim 1 wherein said protein comprises an amino acid segment of SEQ ID NO:2 from approximately amino acid 11 to approximately amino acid 443 of SEQ ID NO:2.

7. The protein of claim 1 wherein said protein consists of an amino acid segment of SEQ ID NO:2 from approximately amino acid 11 to approximately amino acid 443 of SEQ ID NO:2.

8. The protein of claim 1 wherein said protein comprises the amino acid sequence of SEQ ID NO:8.

9. The protein of claim 1 wherein said protein consists of an amino acid segment of SEQ ID NO:2 from approximately amino acid 11 to approximately amino acid 390 of SEQ ID NO:2.

10. A method of controlling a coleopteran pest wherein said method comprises contacting said pest with an isolated, pesticidal protein wherein said protein comprises a pesticidal fragment of the full-length *Cry*6A toxin of SEQ ID NO:2, wherein said protein has a molecular weight between approximately 34 kDa and approximately 50 kDa.

11. The method of claim 10 wherein said protein has a molecular weight of approximately 40-48.7 kDa.

12. The method of claim 10 wherein said protein consists of a pesticidal fragment of the full-length *Cry*6A toxin of SEQ ID NO:2.

13. The method of claim 10 wherein said protein comprises the amino acid sequence of SEQ ID NO:6 or a pesticidal fragment of SEQ ID NO:6.

14. The method of claim 10 wherein said protein consists of the amino acid sequence of SEQ ID NO:6 or a pesticidal fragment of SEQ ID NO:6.

15. The method of claim 10 wherein said protein comprises an amino acid segment of SEQ ID NO:2 from approximately amino acid 11 to approximately amino acid 443 of SEQ ID NO:2.

16. The method of claim 10 wherein said protein consists of an amino acid segment of SEQ ID NO:2 from approximately amino acid 11 to approximately amino acid 443 of SEQ ID NO:2.

17. The method of claim 10 wherein said protein comprises the amino acid sequence of SEQ ID NO:8.

18. The method of claim 10 wherein said protein consists of an amino acid segment of SEQ ID NO:2 from approximately amino acid 11 to approximately amino acid 390 of SEQ ID NO:2.

19. The method of claim 10 wherein said protein is produced by and present in a plant.

20. An isolated polynucleotide that encodes a protein of claim 1.

21. A transgenic microbial or plant cell comprising a polynucleotide of claim 20.